THE

MEDICAL EXAMINER.

A

Semi-Monthly Journal of Medical Sciences.

EDITED BY N. S. DAVIS, M.D., AND F. H. DAVIS, M.D.

No. VI. CHICAGO, MARCH 15, 1875. VOL. XVI.

Original Communications.

THE DIFFERENCE BETWEEN CARCINOMA AND SARCOMA.

THE following cases and illustrations were laid before the Society of Physicians and Surgeons, by Dr. E. Andrews, Professor of Surgery in Chicago Medical College, and Dr. L. Curtis, Professor of Pathology in the Woman's Medical College. As the distinction between these diseases is obscure in many minds, the authors have reproduced the essay in these pages, to give a clear idea of the differential diagnosis.

CASE I. — CARCINOMA. — *Clinical History.* — Mrs. A., of Wisconsin, aged about forty years, presented herself with a small tumor on the foot below the inner malleolus. The mass was of the size of a large hazel-nut, and had been some six months in growing. It was devoid of cuticle; and appeared like a fungus hæmotodes, except that there was little or no bloody effusion. The lymphatic glands were not perceptibly implicated at that time, but a section of the tumor placed under the microscope, showed very clearly the structure of carcinoma, or true cancer.

Ether having been administered, the tumor was excised. Locally, it was a cure; the disease never re-appearing in the original locality; however, in the course of a year or more afterwards, the lymphatic glands above began to show cancerous enlargement. About twenty-one months after the operation, we learn that she was attacked with violent pains in the head, and died in two or three days. No *post-mortem* examination has been reported to us.

Microscopic Examination.—Fig. 1 is an exact reproduction of a specimen of this tumor, as prepared by hardening it for some days in dilute chromic acid, and then shaving off very thin slices. The latter were steeped a few minutes in a solution of aniline, and then mounted on a glass slide. The characteristic struc-

ture of carcinoma or true cancer is very distinct. The framework of the mass consists of bundles (*trabecula*) of white fibres, surrounding rather large spaces or *alveoli*, as the pathologists term them; which, though varying much in size, average not very far from $\frac{1}{200}$ of an inch in diameter. These *alveoli* are packed full of rounded cells, which, however, do not adhere firmly to the walls of the cavities, nor to each other. Hence, in the thinner parts of the slice they may be brushed out, so as to leave only the fibrous framework, which is well shown in the engraving. This specimen is a soft cancer; but in hard cancers, the bundles of fibres are thicker. These *alveoli* packed full of rounded cells, constitute the essential microscopic character by which we distinguish carcinoma, or true cancer, from all other tumors.

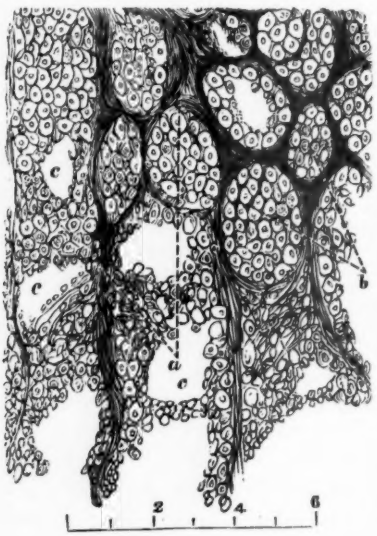

FIG. 1.—*a*, Fibrous framework. *b*, Alveoli, packed full of rounded cells. *c*, *c*, *c*, Alveoli, from which the cells have been partly brushed out.

CASE II. — SARCOMA. — *Clinical History.*—Miss B., aged twenty years, resided in Chicago. Six months ago, she presented herself to a surgeon with a moderate sized tumor in the subcutaneous tissue of the neck, and another of larger dimensions on the inner side of the right thigh. The surgeon consulted, removed the tumors, but after a moderate period, both returned in the same places. Six months later, she fell under our observation. She had now five tumors well defined, besides two or three small nodules, which seemed likely to produce similar growths. None of them were so situated that they could have been derived in the usual course from each other by transmission of germs along the lymphatics, but all were in the subcutaneous connective tissue. One was upon the right side of the neck, one on the right breast, one upon the left side of the abdomen, one on the outer, and another on the inner side of the right thigh. None of these tumors had produced the slightest perceptible induration or enlargement of their adjacent lymphatic glands. They had the general appearance, however, in other respects, of soft cancer. The one upon the abdomen had been lanced by a physician, in the hope that it might be an abscess, but only blood followed. This incision never closed, but put on the appearance of a fungus hæmatodes. From this growth, the specimen was taken represented in Fig. 2. There was no cachexia, and the patient seemed in good general health. Soon afterwards, however, the open ulcer on the abdomen gave origin to a malignant attack of erysipelas, which extending down to the groin, followed the connective tissue under Poupart's ligament, reached the interior, and produced a fatal peritonitis.

Microscopic Examination. — Specimens from this tumor are shown in Fig. 2. Part of the growth was what is called round-celled sarcoma, while another portion shaded off towards fibrous structure. There were no alveolar spaces, packed with loose cells, but some parts consisted of pure cells, while others were made up of adherent fusiform cells, shading off in places into a solid fibrous structure. Thus, though the mass contained both cells and fibres, yet the fibres enclosed no *alveoli*, and constituted no framework. Where fibres existed, they constituted the entire mass; and where round or fusiform cells prevailed, they, in like manner, constituted the entire structure, excepting, of course, that occasional blood-vessels penetrated the tissue.

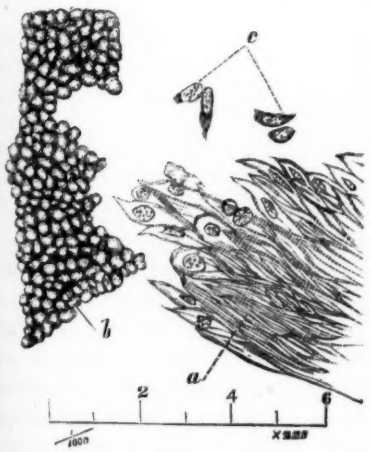

FIG. 2.—*a*, Mass of spindle-shaped cells. *b*, Mass of rounded cells from another part of the tumor. *c*, Elongated cells torn from the mass and adherent to each other.

Comparison of the Pathology. — If now we compare these diseases, we shall see an apparent reason for their different clinical history.

Pathologists at present are of the opinion that the *alveoli* of carcinoma are enlarged lymphatic spaces, and lined with the lymphatic endothelium. If this is so, the loosely connected cancer cells in them are inside the lymphatic system, and hence would naturally transmit germs along the lymphatic trunks to be developed wherever they might be arrested, which would usually be at the nearest lymphatic glands. This, if it shall be finally established, will fully explain the infection, and the almost exclusive multiplication of carcinomatous tumors along the routes of the lymphatic system.

On the other hand, the cells or fibres of sarcoma are judged by pathologists to be outside of the lymphatic cavities, and hence they transmit no germs along those routes, and do not infect the lymphatic glands.

As the cells of sarcoma are firmly adherent to each other, they are not easily dislodged and distributed by any cause, hence sarcoma is only occasionally found multiple.

The following tabular view will give a condensed and clear idea of the difference between the two diseases:

CLINICAL HISTORY.	
CARCINOMA.	SARCOMA.
The tumors generally multiply, and do so almost exclusively along the lymphatic routes; hence, after complete excision of the original tumor, there are usually contaminated lymphatic glands left which become carcinomatous tumors.	The tumors rarely multiply, and when they do it is almost never by the lymphatic routes; hence, after complete excision, there is considerable hope of permanent exemption from the disease.
MICROSCOPIC STRUCTURE.	
The tumor consists of a fibrous framework, surrounding *alveoli*, or cavities averaging about 1–200 of an inch in diameter, which cavities are packed full of nucleated cells, rather larger than blood corpuscles.	The tumor consists either of rounded or spindle-shaped cells, which latter often assume the form of fibres, but the fibres do not enclose cavities filled with cells. In one region of the tumor, the cells, if they exist, constitute the whole tissue; or in another part, if fibres are found, the whole mass consists of fibres.

The cells are not adherent to each other, and hence can be easily brushed out of their specimens, leaving the fibrous framework empty.	The cells are adherent to each other, separating with difficulty.
The cells are either rounded, or else irregular like those of epithelium.	The cells may be rounded, but are often spindle-shaped, or even prolonged into fibres.
It is believed that the alveoli are dilated lymphatics, and consequently that the contained cells are inside the lymphatic system.	It is believed that the cells are outside of the lymphatic cavities.

Practical Conclusions.—Carcinoma and sarcoma are probably both local diseases in the outset, and could they be excised or otherwise destroyed sufficiently early, would result in a permanent cure. The fact is, however, that in carcinoma germs have usually been sent along the lymphatics, beyond the reach of the surgeon, long before the patient presents himself for treatment; hence, the removal of the original tumor does not prevent the recurrence in the lymphatic glands. The cancer, however, ought to be removed, and the earlier the better; and it would seem to be our duty at the same time to remove the corresponding lymphatic glands, even if they are not perceptibly enlarged, because their infection may be considered as already accomplished, though the development be not yet manifest. There is no rational doubt that early and thorough extirpation of cancer on the average prolongs life and comfort.

The removal of sarcoma is a much more hopeful procedure. The glands not being infected, the patient often shows little tendency to a recurrence after a thorough excision, so that an early and complete removal is above all things to be desired.

No. 6 Sixteenth St., Chicago.

CEREBRAL ABSCESS—HISTORY—DEATH—AUTOPSY.

BY D. A. K. STEELE, M.D., LATE RESIDENT PHYSICIAN,
COOK COUNTY HOSPITAL.

THE following case came under my observation while an *interne* in the County Hospital, and may present some features of interest to readers of the EXAMINER.

Michael Ganning, æt. about fifty-five; laborer; native of Ireland; was brought to the hospital in an unconscious condition on the afternoon of August 19th. Learned from friends that he had been drinking heavily for some weeks, lying around in a stupid condition, supposed to be superinduced by his continued debauch.

On admission, patient lies in a semi-comatose condition; breathing somewhat stertorous, unable to protrude his tongue; eyes sunken and congested; pupils contracted; face expressionless; lips and mouth dry, and coated with sordes. There is partial paralysis of right arm and leg, most marked in the arm. Physical examination of the chest reveals harsh respiration. A sharp, metallic click follows the first sound of the heart at the base. Patient is unable to swallow, showing paralysis of the pharyngeal muscles. Pulse 78, full and hard. Temp. 102½°; resp. 36.

Ordered bowels to be moved by an enema, and directed the nurse to

endeavor to give him some liquid nourishment, milk, and beef-tea.

Aug. 20th, A.M.—Pulse 120; temp. 103°; resp. 42. Bowels moved. Unable to take any nourishment. Directed milk, per rectum.

P.M.—Pulse 168; temp. 104°; resp. 48.

Aug. 21, A.M.—Body assuming a cyanotic appearance. Pulse 168, very weak; temp. 104½°; resp. 60. Urine passed involuntarily.

P.M.—Symptoms increasing in gravity; died at 3 o'clock.

Post-mortem examination, eighteen hours after death.

Rigor mortis marked. Body cyanotic.

On removing calvarium, find the superficial veins of the brain distended with venous blood.

On removing the brain, with the exception of the superficial hyperæmia above noted, its general contour seems normal, except at the inferior portion of the middle lobe of the left hemisphere, just where it lies in apposition with the petrous portion of the temporal bone, and immediately in front of the tentorium cerebelli, where a portion of the brain substance about two inches in diameter was found quite soft. While examining the softened portion, a quantity of pus escaped from what seemed to be an abscess.

On section from above of the right hemisphere, it seems normal, with the exception of a small quantity of pus in the right lateral ventricle, which was afterwards found to have escaped from the abscess.

On section of the left hemisphere, found all that portion above the lateral ventricle normal in consistence and appearance.

Left lateral ventricle found filled with pus, and communicating with the abscess.

On section below the lateral ventricle, found the brain substance very much congested and softened, and in the inferior portion of the middle lobe, found an abscess about one and a half inches in diameter, communicating with the left lateral ventricle, from which the pus escaped externally, and into the ventricles, as previously noted. The cerebellum seemed healthy. A moderate amount of sero-sanguinous effusion was found at the base of the brain.

On opening the chest, found firm pleuritic adhesions of both lungs. In the right chest, extending from the second rib, and attached to the seventh, about two inches below the costo-sternal articulation, found an ossified plate about an inch wide and six inches long, curved at its inferior extremity, where it was attached to the seventh rib—it apparently had been developed in the costal pleura. Has no pathological significance. Lungs healthy. Pericardium thickened and adherent to the pleura. Heart weighed thirteen ounces. Mitral and aortic valves thickened. Left ventricle dilated slightly. Spleen small. Liver normal in size and appearance. Kidneys intensely congested; each weighed six ounces. Other organs not examined.

Editorial Department.

WOMAN'S HOSPITAL MEDICAL COLLEGE.

THE fifth annual commencement of the above institution was held on the evening of March 2d, at the First M. E. Church. A large audience of ladies and gentlemen were present. The introductory exercises consisted of an organ voluntary, an invocation by the Rev. Dr. Thomas, and a song quartette. Prof. Bartlett gave the usual address on behalf of the faculty. It consisted of a general exposition of the profession, characteristics of habit and talent necessary for success in medicine, and congratulations and advice to the graduating class.

After another song, Prof. Byford, as President of the Board of Trustees, presented, with a brief but appropriate address, diplomas to the graduating class, consisting of the following persons: Miss Sarah A. Brown, Wis.; Miss Lottie Calkins, Ills.; Mrs. Julia N. Marsh, Cal.; Mrs. Sarah H. Stevenson, New York; Mrs. Elizabeth D. Shelton, Kansas; Mrs. M. P. T. Wagstaff, Kansas; Miss Delight J. Wolf, Mich.; Miss Edith A. Root, Ill.

Sarah A. Brown in behalf of the class presented Flint's Physiology to Prof. Mary H. Thompson, which act was nicely acknowledged by the professor.

Mrs. Sarah H. Stevenson read not only an interesting but also an instructive thesis on the "Evolution of the Heart." Commencing with the mere cell, from which she ascended rapidly up through the vegetable kingdom and lower species of animals, to the heart of the mammalia, showing the various steps of development in the *modus operandi* of conveying the nutritive material to all parts of these various living organisms.

The same lady also delivered the class valedictory. It contained more germs of truth and praiseworthy eloquence than we generally hear in such addresses.

A few remarks by Rev. Dr. Thomas closed the exercises.

AMERICAN MEDICAL ASSOCIATION.—We hope the profession of the Northwest will remember that the next meeting of the American Medical Association is to be held in Louisville, Ky., commencing on the morning of the first Tuesday in May next. Let every State Medical Society, and every City, County, and District Medical Society entitled to representation in their State Society, see to it that their delegates are appointed, and that they attend the meeting. From information which we have received, we anticipate an unusually interesting and profitable meeting. Assurances of attendance on the part of some of the most eminent men in New York and New England, add to our confidence, that the meeting will be a good one; and also to our desire that the profession in the Northwest should be well represented.

Correspondence.

A MORNING IN THE CHARITE HOSPITAL.

VIRCHOW.—Eight A.M., on a cold, winter's morning in Berlin, is *schrecklich* early, but if you wish to attend Prof. Virchow's lecture, you must find your way by that time to the Pathological Institute, which is built in one of the many quadrangles of the great Charity Hospital. On the lower floor are the museum and dissecting rooms; above, the room for microscopy, a reading room, in which is placed Prof. Virchow's immense library, to which his students have free access; and adjoining this, a lecture-room, elegant in hard woods and fresco. About the room, something in the fashion of a Grecian border, rectangulates a long table, with a miniature track running its whole length, not as a toy railroad, as it might seem, but as a means of transit for the score of microscopes which stand waiting at the farther end. Close by, are as many more bright red platters, heaped high with broken bits of poor humanity; for, as all who die in the great Charite must pass through this institute, there is never lack of material. To-day's platters, for instance, show carcinoma of the stomach, liver and œsophagus, pleuro-pneumonia, hydrocele, aortic sclerosis, carnification of the lungs, granular pharyngitis, renal cicatrices, and diphtheritic membranes, *ad salictatem*, for just now diphtheria happens to be epidemic.

"Meine Herren," says a little, jaundiced, shabby object, that might easily be mistaken for an old clo' man; and without further introduction, Herr Prof. Rudolph Virchow takes up the first platter and begins a dissertation upon cancer; illustrating his theories by diagrams in colored chalks upon the blackboard and by appropriate specimens. At the same time, microscopic preparations to illustrate the histology of the subject under discussion, were traveling along the railway, of which we have just spoken. So pass two or three hours, according to the amount of material on hand, Virchow speaking continuously all the while, spicing his remarks every now and then with a growl at a dilatory student, or a fling at Christianity, to enjoy which he would go further out of his way than John Randolph is said to have done to kick a sheep.

FRERICHS.—*F. Th.*, 11–12, *Medical Clinic*, *Charite*, says the *stundenplan*, so hurry across the quadrangle, or you may be obliged to claim your seat *vi et armis*, if you can; for in spite of cards and numbered places, the best seats on the front rows are an almost daily cause of "unpleasantness" between America and Germany. To-day, victory sides with our glorious bird, and we post ourselves at the head of the camp bedstead, upon which has just been brought in, a woman with a head as big as a peck measure. Moon-faced, fatherly Frerichs removes the cotton batting, and we behold a most gorgeous case of facial erysipelas, with bullæ attached. Over this he lingers, as if loth to let

so beautiful a specimen depart, telling us of erysipelas variegata, marginata, dermatosa, bullosa, etc., etc.; but at last directs that a cathartic should be given, and sends her away, having repacked her in cotton wool.

Next comes an unfortunate man, who has been suffering for nearly five weeks from intestinal war and subsequent blockade. Nearly the whole German pharmacopœia has been poured into him, and still the port will not open. Why? "Purulent exudation, paralysis of the *darmmusculature*, obstruction from gall stones, scybala, intussusception, incarceration, angulation and ulceration," are all suggested as possible causes, but which is to blame, will be shown certainly by the post-mortem. [Here to enliven the patient, drawings from similar cases, and sections from diseased intestines were passed about.] "In the meantime, gentlemen, we will try to diminish peristaltic action by small doses of opium. Will use large injections of tepid water, also; and if tympanitis becomes too great, will draw off the accumulated gases by means of an explorative needle."

N. B.— Two days later, patient furnished very interesting *obduction*.

Gleanings from Our Exchanges.

ÆTIOLOGY AND TREATMENT OF PNEUMONIA.

DISCUSSION OF NEW YORK ACADEMY OF MEDICINE, FEBRUARY 4, 1875.

From New York Medical Journal, March, 1875.

THERE was a large gathering at the Academy to hear the discussion on the "Ætiology and Treatment of Pneumonia."

Dr. Austin Flint, by request of the President, opened the discussion by indicating some points of interest that might be freely considered. He noted first the diverse characteristics of the disease at different localities, and at different times in the same localities. In the Southern States pneumonia has always been a more grave disease than it has been in the North. Again, the disease as it manifests itself at the present time in this city is of a more dangerous character than we are usually in the habit of considering it. Dr. Flint gave, in this connection, the brief histories of several cases which came under his care during the month of January, each of them dying in a few days. As regarded the treatment of the disease, he took up fully the use of bleeding as a therapeutical agent, and considered the views and results of Louis on this matter. Louis reported seventy-eight cases in which there were twenty-eight deaths; he reported also other twenty-nine cases, having four deaths. In his observations he did not regard the subject of mortality, but simply whether bleeding did or did not have a tendency to shorten the disease. The conclusions that he arrived at were, that if bleeding were practiced in the earlier days of the disease, it not only had a happy effect, but shortened its duration by four or five days; whereas, if the bleeding were delayed till late in the disease, no good effect was obtained. Jackson reported fifty-one cases in which he had eight deaths.

His treatment was the same as that of Louis. Dr. Flint reported one hundred and thirty-three cases that came under his own observation, and in which bleeding was practiced only in twelve of them. There were thirty-five deaths, but a point of interest connected with them was that they were observed in different cities: sixty-four at Buffalo, with eleven deaths; eleven at Louisville, with seven deaths; fifty-eight at New Orleans, with seventeen deaths. He said also that there was one very important thing to bear in mind in the consideration of pneumonia; and that was that when the inflammation was confined to a single lobe, and there were no complications, the tendency was to recover; and as regards the treatment, whether bleeding exerted an influence in preventing the complications which might arise, such as gangrene of the lungs, extension of the inflammation, pericarditis, and heart-clot. He referred also to the value of opium in diminishing the constitutional disturbance; and to the plan presented latterly, of keeping the heat of the patient down by antipyretic treatment. He was in favor of the administration of quinia, and had seen marked benefit from its use. Dr. Flint read a short description from a medical periodical of pneumonia developing in a high school which had been exposed to the influence of sewer-gas. The facts were as follows: The sewer authorities, in defiance of the protest of the principal of the school, placed a ventilator so as to infect the institution with sewer-gas. Shortly after a number of cases of pneumonia developed, and, as a consequence, the school had to be closed. For many years previous to this there had been no sickneas in the institution, and, when the ventilator was removed, no new cases occurred, leaving the strong inference that the sewer-gas was the peccant agent.

Dr. W. H. Thomson read the histories of five cases of pneumonia which had recently been under observation in Bellevue Hospital, and in which the main treatment had been antipyretic. The method pursued was to apply to the chest ice-bags till the temperature fell. Of the five cases only one proved fatal. Dr. Thomson read a selection from Niemeyer bearing out his opinions as to the effect of cold in keeping down the temperature and improving the chances of the patient. He said also that the medicinal treatment consisted in the administration of ten grains of the carbonate of ammonia every two hours, with one grain of quinia every hour.

Dr. A. L. Loomis said that in the consideration of pneumonia the two main elements to bear in mind were the ætiology and treatment; and of the causes the most important was age. We saw it mostly between twenty and forty years, and again after sixty—the pneumonia of children was broncho-pneumonia. The predisposing cause was the cause of the disease, and by the predisposing cause was meant anything that lowers the vitality of the patient. Here in New York we are all staggering under the influence of malaria, and with any slight exposure there may follow a pneumonia. Inanition, the continual use of alcoholics, the poison of sewer-gas, septicæmia, rheumatism, pyæmia, and all those conditions which debilitate, render the system at any time liable to an attack from a cause which, in sound health, would prove inoperative. Dr. Loomis said also that, in his experience, idiopathic pneumonia was of such rare occurrence that he questioned its existence. He did not think there could be much difference of opinion as to the injury received from venesection in pneumonia, where the predisposing cause was debility; the indication was to find and combat the cause of the debility. As to the use of ice in the treatment of the disease his opinion was decidedly against it, though he was sorry he had not a more extensive experience. He found that it kept down the temperature as long as it was applied to the chest, but he found also that at the same time there was a tendency for the disease

to spread. He found, on coming on duty at the Mount Sinai Hospital, several cases treated by ice, but they all died. The cause of the high temperature was the metamorphosis of tissue that takes place, and the remedy, in his experience, that prevented this change was the sulphate of quinia. He had found a full dose of the drug to lower the temperature from one to one and a half degrees, and considered that ten grains should be given at a dose. When the heart began to flag and grow weak the remedy was alcohol. He found it the only thing to be relied on to stimulate the heart to renewed activity, and ward off œdema of the lungs and other causes of failure of the circulation.

THE CONTAGION OF PUERPERAL FEVER.

From the Lancet, January 23, 1875.

THE contagious nature of puerperal fever, and the various ways in which it may be communicated, is a question of the greatest importance to both the profession and the public. A knowledge of what has been written on this point, and of the many interesting cases bearing on it, ought to be in the possession of every one who intends to practice midwifery, for without such knowledge he may unconsciously carry with him the contagion, and communicate it to those under his care; and even with such knowledge, it may be in some instances impossible to avoid becoming the agent of this terrible disease. Puerperal fever is a term which embraces a number of diseases having different causes, symptoms and anatomical lesions. One class of these maladies is that brought on in the puerperal woman by contact with the poison of an acute specific disease, as typhus or erysipelas. In these cases there can be no question of the contagious character of the affection, for instances are recorded in which the puerperal woman has been the means of communicating the original disease to a third person. Another class of cases is that which is due to absorption by the vagina of a poison introduced by the examining finger of the accoucheur. The poison in these cases may be the cadaveric or decomposing animal matter, such as the discharge from the generative organs of a patient suffering from puerperal fever; or it may be the contagion of an acute specific disease. There is a third class of diseases which is included under the term puerperal fever, which is generated within the body of the patient, the cause being decomposition and absorption of coagula or portions of the placenta retained in the uterus, or the breaking up and entrance into the circulation of a clot which has formed in the uterine vessels. The form of the disease depending on the introduction into the vagina or the formation within the body of a poison other than the acute specific contagion, is not contagious in the sense that typhus fever and erysipelas are, but it is certain that it is not unfrequently communicated by the intervention of a third person, that person being the medical attendant. Numerous instances are on record of outbreaks of puerperal fever, in which all or almost all the cases occurred in the practice of one man. Dr. Armstrong says that out of forty-three cases which occurred in Sunderland in 1813, forty happened in the practice of one surgeon and his assistant. Dr. Gordon observed, with reference to the epidemic which took place in Aberdeen in the year 1789–90, that the disease attacked such women only as were visited or delivered by a practitioner, or taken care of by a man who had previously attended patients affected

with the same disorder. Roberton states that from December 3, 1830, to January 4, 1831, a midwife attended thirty patients for a public charity; sixteen of these were attacked with puerperal fever, and they all died. In the same month, 380 women were delivered by other midwives for that institution, but none of the 380 suffered in the smallest degree. Evidence of this kind might easily be multiplied, but we have said enough to show that the disease is in some cases contagious in the sense typhus is, and that in all cases it is communicable by the accoucheur or midwife. And this is not to be wondered at, for we know how difficult—nay, how impossible—it is for some time to remove from the hands which have been engaged in making a post-mortem examination the odor of the cadaver, even by the most abundant ablutions and the careful use of disinfectants. We know also, what a small quantity of septic poison is sufficient to engender a fatal disease even in a healthy person; but in the puerperal woman the poison acts at a great advantage, because her system is in a more or less exhausted state after the parturient efforts, and it is engaged in throwing off waste products—the wasting from severe muscular action and from the involution going on in the uterus. Besides, the poison when communicated by the examining finger, is introduced to a part capable of absorbing rapidly, and one which, at that time, is wounded, bruised, and sore from the mechanical violence to which it has been subjected. Under these circumstances, the patient is peculiarly susceptible to the slightest contagion or inoculation. Again, practitioners of midwifery find it their duty frequently, during the first few days after labor, to examine the vaginal discharge. In this manner their hands become more or less tainted; and if the patient be suffering from puerperal fever, this taint is sufficient, even after the most careful washing and use of disinfectants, to communicate the disease to a patient examined soon after. With midwives it is far worse, for generally they act both as nurse and midwife to the poor patients on whom they attend; and thus they have daily to perform the part of nurses, and consequently have their hands, however careful they may be, always tainted with discharge. Add to this the slightest carelessness in the use of soap and water and disinfectants, and there is at once formed a propagator of disease who carries death wherever she goes. This double function of midwives is probably the reason that, in recent outbreaks, they have played a more prominent part than professional men. What, then, are the duties of the medical practitioner in whose practice a case of puerperal fever has occurred? He may change his clothes, he may take any number of baths, he may use all sorts of disinfectants, and still the fatal poison may hang about him, and he may be the bearer of it. Under these circumstances he should refrain from practicing midwifery for a season. It would be wantonly wicked in us were we to speak hesitatingly when such issues are at stake. The danger to the public arising from the non-observance of the precautions above named are incalculable, as we have seen in the outbreak in the neighborhood of the Wandsworth road and at Coventry; and whatever sacrifice the medical man may have to make in carrying out the precautions named, we unhesitatingly say he should make it. In the majority of cases, however, the sacrifice to be made would be very light indeed. Three years ago, an outbreak of puerperal fever took place in a provincial town of considerable size. On investigation, it was found that all the cases had occurred in the practice of one surgeon and one midwife. The members of the profession located in the town met and requested the gentleman in question to refrain from practicing midwifery for one month, and at the same time agreed to attend his cases for him. The midwife was likewise requested not to attend cases for a similar period. This was agreed to, and no new cases occurred after that

date. This illustrates well the line of conduct that should be adopted by the profession in any town where this terrible disease may happen to appear. The unfortunate practitioner in whose practice the case has occurred should bring it before the profession, and should cease from attending midwifery for a time. On the other hand, his professional brethren should help him through his difficulty, and make his loss as small as possible by attending his cases for him during the period of his abstention.

CLINICAL LECTURE ON THE USE OF DIGITALIS IN DISEASES OF THE HEART.

DELIVERED AT THE PHILADELPHIA HOSPITAL BY H. C. WOOD, JR., M.D.

From the Canada Medical Record.

THERE are, gentlemen, primary physiological facts concerning the action of digitalis which I shall to-day lay down somewhat dogmatically as the premises for the discussion of the subject. I do this because time is wanting in which to give you the proofs of these premises, even if they were not out of place in a clinical lecture-room; and I do it the more willingly because those of you who may be inclined to be skeptical can find these proofs in detail in my treatise upon therapeutics.

By experiments upon the lower animals two things have been definitely ascertained: 1, That in the lower animals digitalis is a very powerful stimulant to the inhibitory apparatus of the heart; and 2, That it is also a powerful stimulant to the muscular substance or its contained ganglia.

We know the first, because after the administration of the drug, when the heart has already been affected by it, and is beating slowly, if the inhibitory nerves be cut, the organ springs, as it were, into an intense rapidity of action. The drug stimulates the cardiac muscle, because the amount of work performed by the heart is vastly increased under its influence, even when the viscus is disconnected from the body. We also know as a probable fact that digitalis causes a general vaso-motor spasm, a contraction of the muscular walls of the vessels. This much for the observations made on the lower animals.

When digitalis is administered to man, the first thing we observe is a diminution in the number of heart-beats, and an alteration of the character of the pulse, which becomes full, and hard, and strong. You can recognize by the feel of the blood-wave that both the force of the contraction of the heart and the amount of blood thrown out during the systole are increased. If the drug is given in poisonous doses, the pulse may, it is true, become rapid, and smaller than normal. The meaning of this can be explained by referring again to the animal. We find that here the same phenomena are observed, and that if a very large dose is given the heart may be suddenly arrested in systole from irritation of the cardiac muscle; before this happens, for a time, the tendency to contract is so great that the systole will occur before the complete filling up of the cavities. Two short, imperfect waves are thus produced instead of one long one: this is the double-beat, forming a dicrotic pulse. In man the "dicrotic pulse" of digitalis is classical, and its mechanism is evidently the same as that of the double arterial wave of the lower animals; instead of a long pause and a full dilatation, the first attempt at diastole is interrupted by an abortive systolic contraction. As in animals, probably in these cases also, the apex of the heart scarcely relaxes at all. Again, a person under the influence of digitalis may have a heart beating 50

or 60 per minute when in a recumbent posture, but on sitting up the pulse may suddenly become weak and mount to 100 or 120. The action of digitalis has been carried in such a case to the point at which an excess will throw stimulation into over-stimulation and imperfect contraction. The act of rising brings an extra strain on the heart, and the muscle loses its power of regular action.

Digitalis, then, in man, by its action on the inhibitory apparatus, prolongs the period of diastole, thus giving time for the ventricles to fill up with more blood than usual, and also increases the muscular power of the heart, so that when it contracts a greater volume of blood is thrown with a greater force into the arterial system. Before we begin to apply these principles, remember also that the vascular system under the control of the vaso-motor nerves is probably kept in a state of contraction by the influence of digitalis.

Almost nothing but common sense is needed now to apply these facts to the treatment of heart diseases. If what has been said is true, digitalis ought to be useful when there is a deficiency of heart-power. Remember that it is not a rag that will stop a leak, and do not fall into the common error of expecting the drug to perform impossibilities. It cannot tighten a leaking valve. It cannot open and smooth down a contracted orifice. In other words, in valvular lesions it can only indirectly remedy the defects; and although often you will get the most surprising results from its use, yet in every case of valvular lesion there comes, sooner or later, a stage when digitalis is powerless. It is when the valves are healthy, and the cardiac failure is due simply to the weakness of the muscular walls that digitalis exerts its most wonderful powers. Nothing is more marvelous in clinical medicine than the relief you can sometimes rapidly afford in cases of simple dilatation of the heart.

INTERESTING EXPERIMENTS UPON THE BODY OF HEIDENBLUT, THE MURDERER.

Philadelphia Correspondence, Boston Med. and Surg. Jour., Feb. 25, 1875.

INTERESTING experiments were performed a few days since upon the body of Heidenblut, the murderer, directly after his remains were removed from the gallows. Those upon the laryngeal nerves were instituted at the request of Dr. Weir Mitchell, and were skilfully performed by Dr. W. W. Keen, with the assistance of Dr. Carl Seiler. In the *Medical Times and Gazette* for December 19, 1874, was published a paper read by Dr. George Johnson before the Royal Medical and Chirurgical Society of London, to demonstrate and explain the theory that bilateral spasm and bilateral paralysis of the larynx may result from the pressure of an aneurism, or other tumor, upon the pneumogastric nerve of one side only. Reference was made to two cases of aneurism, one of the innominata, one of the aorta, which caused bilateral palsy of the larynx during life. After death, however, it was found that the vagus of one side only was involved. In both cases the laryngeal muscles of both sides were paralyzed, and Johnson's theory was that this was due on one side to direct pressure; on the other to reflex action. Dr. Johnson further said that pressure on one recurrent nerve (which is supplied with efferent motor fibres only, originating in the spinal accessory), will cause direct unilateral paralysis of the larynx, but cannot cause bilateral spasm or bilateral palsy. On the other hand, pressure upon the vagus involving its afferent fibres may

cause both spasm and palsy of bilateral character. The reason for this bilateral action he considered to be the intimate connection between the nerve-nuclei of the two sides, thus according with the views of Dr. Broadbent. Dr. Lockhart Clarke has demonstrated that three sets of commissural fibres connect the nerve-nuclei of the origin of the spinal accessory, and this fact was also used by Dr. Johnson in support of his theory. At the same meeting, Dr. Powell stated that he had obtained like results in the dog, but called attention to the difference which exists in different animals, and added that faradization of one recurrent in the cat produced abduction of both cords. "Dr. John Reid," said Dr. Powell, "produced bilateral spasm in the larynx of the dog, by galvanizing one recurrent." Some years ago, Dr. Weir Mitchell discovered a remarkable chiasm in the laryngeal nerves of the turtle, and also experimented upon the cat and rabbit, but without result. He did not examine the dog. These statements of the English physicians, therefore, prompted his proposal that Dr. Keen should aid him in new experiments to determine these assertions in case of the dog. A few days later, Dr. Keen was invited to attend the execution of Heidenblut, and thereupon came the idea of making these experiments upon the human body directly after death.

Within thirty minutes after the execution of the criminal, Dr. Keen carefully dissected out the pneumogastric of one side, insulated the nerve by means of strips of pure rubber cloth, and then applied the two wires of the battery directly to the nerve. Meanwhile, Dr. Seiler attempted to watch the action of the larynx in the ordinary manner; but the hyoid bone of the subject had been fractured, thus closing the pharynx. Besides this, the throat of the dead man was occluded by a tenacious mucus, so that it was impossible to see the larynx. Dr. Keen therefore made an incision just above the thyroid cartilage, large enough only to admit the mirror, and recommenced the faradization of the nerves. I should remark that the vertebræ were neither fractured nor dislocated. This is the third case of judicial hanging in which Dr. Keen has verified this condition of the spinal column. The sterno-cleido-mastoid muscle of the right side had, however, been completely torn asunder by the pressure of the rope, the sheath being the only bond of union. Both vagi were apparently uninjured, and the recurrent nerves had been untouched by the rope. Upon re-applying the current, the vagus responded perfectly; but only one side of the larynx was affected. In spite of a forty cell current, and in spite of the afferent fibres which this nerve contains, no other result could be produced. Bilateral action of the vocal cords by galvanization of one recurrent nerve could take place only in case a chiasm existed between the laryngeal nerves (because this nerve contains only efferent motor fibres), and no such chiasm was found; only one nerve responded. Except it be that in this case the nerve centres were injured by the pressure of the rope, thus preventing a transmission of the current from one set of nerve-nuclei to the other, these results would seem to refute the assertions of Dr. Johnson.

Dr. Keen next galvanized the phrenic. The nerve did not respond. He then applied the current to the intercostal muscles, and proved most satisfactorily that the internal intercostals are muscles of inspiration and that the external intercostals are muscles of expiration; the former lifting the ribs, the latter depressing them. This manner of testing these muscles, which Dr. Keen was probably the first to attempt, will undoubtedly decide the question as to their real function, touching which there has been so much confusion of opinion. He also tested some of the facial muscles in relation to the part they take in expression, and found that the pyramidalis nasi, as stated by Darwin, is a direct antagonist to the occipito-frontalis.

Dr. Keen read a paper giving the results of his experiments upon Heidenblut, before the college of Physicians on Wednesday evening last. The details will therefore soon be published. Dr. Keen closed his paper by calling attention to the important results which this new method of investigation, namely, faradization of the muscles of the recently dead, promises to yield.

"In the living body, it is almost impossible to obtain the action of a single muscle, especially in the face, where the emotions, as pain, amusement, etc., involuntarily arouse the action of other muscles. In the recently dead, the results will be far more accurate, and therefore to the anatomist, physiologist, and artist, are of the greatest interest and importance."

UNGENANNT.

Philadelphia, Feb. 5, 1875.

RAW-COTTON DRESSING FOR WOUNDS (PANSEMENTS A L'OUATE).

BY PROF. WILLIAM H. VAN BUREN, M.D.

From New York Medical Journal, March, 1875

I CANNOT leave this subject without calling your attention to a novel mode of dressing wounds with raw cotton, which has lately attracted much attention in Paris. I have already spoken of raw cotton as an American remedy in burns, but great advantages are now claimed for it as an application for recent wounds; it is said to protect them from the contact of the poisonous particles which are assumed as everywhere floating in the air as dust. These poisonous particles, in the present state of our knowledge, are supposed to be bacteria, or the spores of some analogous organism, capable of getting into the blood through open wounds, and acting as a ferment, or, at least, of being carriers of poison. So-called zymotic diseases, such as pyæmia and erysipelas, which interfere so often with the successful treatment of open wounds, especially in hospitals, are generally believed to owe their origin to this cause. Now, Pasteur, who discovered that putrefactive fermentation was due to the presence and growth of vegetable organisms, and Tyndall, who has experimented largely upon atmospheric dust, had both proved that raw cotton was the most effective filter by which the air can be deprived of these floating particles; that, when forced to pass through its meshes, air is rendered pure, as far as these poisonous particles are concerned. During the winter of 1870–71, when the hospitals of Paris were crowded with wounded soldiers and Communists, accumulated through the coincidence of the Prussian siege, the civil war, and famine, and when pyæmia was so universally prevalent that an amputation was almost of necessity fatal, this assertion of Pasteur concerning the filtering power of raw cotton occurred to one of the surgeons of the St.-Louis Hospital, Alphonse Guerin, as a possible source of advantage. He forthwith tried it as a dressing on several patients, binding it upon their wounds in liberal quantity, and keeping it accurately applied by firm compression of bandages. To his surprise and delight he found that the chill, by which the advent of the fatal complication is always heralded, did not occur, and his patients went on to get well. Encouraged by this experiment, he repeated it with equal success; those dressed with raw cotton were found to do well, while others in the same ward died of the prevailing endemic. The result was so remarkable that surgeons came from other hospi-

tals to St.-Louis to witness the rare sight of patients recovering after amputation, and themselves adopted this mode of dressing wounds. Shortly, the use of raw cotton was systematized as a surgical dressing, and it has since been very generally employed. Desiring to learn the estimation in which it is now held, I sought information from my colleague, Dr. L. A. Stimson, who is at present in Paris, and I find that, although the prevalence of pyæmia has of course very much diminished in the hospitals, the raw-cotton dressing is still regarded favorably. It is claimed by Dr. Guerin, in recent communications to the French Academy (March 23 and May 18, 1874), that, in accordance with Pasteur's assertion, when properly applied, it effectually excludes a recent wound from contact with all poisonous germs—*without entirely excluding air*. He has found pus, in contact with a wound which had not been disturbed for thirty days, perfectly fresh in appearance and free from odor; it was changed in its anatomical and chemical characteristics, contained no traces of pus-cells, was converted, in short, into an oily emulsion containing large crystals of the fatty acids—showing that oxygen had not been excluded—but it presented no evidences whatever of putrefaction. In his earlier experience he once removed the dressing from two cases, which were doing perfectly well at the end of a week, and within three days both patients had chills, followed by fatal pyæmia. This led him to adopt the plan of applying the cotton-dressing with great care and precision at first, so that its renewal should not be necessitated until the establishment of a barrier of granulations, or the final healing of the wound. If the discharges saturated the cotton and made their appearance upon the surface of the dressing, additional layers of cotton wadding were applied over the old dressing without regarding bulk, and, over these, bandages put on with the greatest possible amount of compressing force; for it is found that where the cotton is applied in sufficient quantity, and of good quality, its elasticity renders the compression equable, and that, so far from being a source of danger, the elastic compression is advantageous. After a circular amputation of the thigh, an assistant steadies the stump, while another pulls apart the edges of the divided integument, and the surgeon proceeds to fill the cavity thus presented to him with small masses of cotton torn from the sheet of wadding, small at first and applied accurately to every part of the cut surface, then larger masses as it becomes filled, and then layers of the wadding are applied over and around the stump and upon the hip and pelvis, and over all a spica-bandage put on with great care, and as much compressing force as possible. No air must come in contact with the wound that has not filtered through the thick mass of cotton. Moreover, this cotton must be of good quality, fresh from the manufactory, and it must not have been exposed to the air of the hospital. Under favorable circumstances he has found it the best plan to leave this dressing in place about two weeks, when the granulating surfaces are usually found ready for approximation for final union, but he never renews a dressing in the foul air of a ward. Tarlatan and collodion straps are preferred to strips of plaster, as more transparent. He *has* obtained *primary* union. Guerin believes, with Lister and Tyndall, that while gases can be introduced into the blood through the lungs, poisonous particles like germs become entangled in the air-passages, and do not as a rule reach the blood by this route. The experiments and deductions bearing on this point are full of interest to the student of surgery, but the point is not as yet definitely settled; for Tyndall himself, in detailing the advantages of using a "cotton-wool respirator," remarks that "it is exceedingly probable that the germs which lodge in the air-passages, or find their way into the stomach with its absorbent system, are those which sow in the body epidemic disease." He adds: "If this be so, then disease can be

warded off by carefully-prepared filters of cotton wool" (*vide* "Dust and Disease," in "Fragments of Science," etc., London, 1871, p. 321, *et seq.*).

It is a curious fact that Lister, the great advocate of the germ theory of disease, and of carbolic acid as a germ-killer, at one time was actually using raw cotton as a dressing for wounds, on account of its value as a filter, antecedent to its adoption by Guerin, but he afterward abandoned it in favor of his "antiseptic gauze" (*Pansements a l'Ouate*," par Raoul Hervey, *Archives Generales de Medecine*, December, 1871, *et seq.*). Guerin's advocates say that the Edinburgh surgeon was so pre-occupied and absorbed in finding out the best modes of using carbolic acid for the killing of germs, that he failed to recognize the probably greater value of the raw cotton as a filter in the dressing of wounds. It is one of the features of Guerin's mode of dressing, to wash a wound thoroughly with some germ-killing liquid, before applying the cotton; but he seems to attach as much value to weak camphorated spirits as to a solution of carbolic acid, using them indifferently.

In conclusion, it is claimed for this new method of dressing wounds, that besides protection from poisonous germs, it prevents inflammation, by its uniform elastic compression, the equability of temperature, the protection from external injury, and partial immobility which it confers; that it promotes the development and growth of granulations, saves the pain and trouble of frequent dressings, and facilitates the transportation of wounded men. It thus favors the scattering of the wounded after a battle, and for this reason, as well as the simplicity of the materials required, and the ease with which they can be applied, it commends itself to the military surgeon. In civil practice it promises to be useful, principally in the large hospitals of great cities, where pyæmia and erysipelas are always liable to become endemic, in preventing poisoning of open wounds by these diseases, and also by thus enabling surgeons to save limbs which might otherwise require amputation.

"SHADOWS FROM THE WALLS OF DEATH."—Facts and Inferences prefacing a book of Specimens of Arsenical Wall Papers, gathered by R. C. Kedzie, M.D., Member of the State Board of Health of Michigan.—The above is the rather sensational title of an interesting and instructive paper upon an important subject. The danger attendant upon the use of paper hangings colored green with arsenical pigments (Scheele's green and Sweinfurt green—arsenite and aceto-arsenite of copper) is not so well known, either to the profession or to the public, as it ought to be. The State Board of Health of Massachusetts sounded the alarm, in 1872, by the publication in its annual report of an able paper "On the evil effects of the use of Arsenic in certain green colors," by Dr. F. W. Draper. The State Board of Health of Michigan now utters a similar warning, through this paper of Dr. Kedzie, and the accompanying book of samples of poisonous wall-paper.

"Perhaps," says the author, "we could not devise a more effectual way to contaminate the air of our houses with a small amount of arsenical dust than by the use of wall-paper colored with arsenical preparations. The large amount of surface exposed, the feeble adhesive power of the size by which the pigments are fixed, the frequent alternations of heat and cold, moisture and dryness, by which the adhesiveness of the size is still more diminished, the currents of air always circulating in a warm room, mechanical displacements by sweeping, dusting, etc., all combine to dislodge the pigments from their position on the paper, and to scatter them in the form of a fine dust in the room, and this dust

may be many hours or even days in settling. * * * This suspended dust is swept along with the air in inhalation, and is lodged upon the mucous surface lining the nasal cavities, the windpipe and its ramifications. * * * This may explain the frequent occurrence of catarrh and bronchitis in those persons who occupy rooms prepared with arsenical wall-paper."

Dyspepsia, neuralgia, pains in the bones and joints simulating chronic rheumatism, headache, general debility, etc., are also enumerated as symptoms which often attend this insidious form of poisoning; their occurrence being readily explained by the absorption of the poison. Want of space, however, prevents our going into a full consideration of the subject, and we content ourselves with the citation of two or three of the cases which are reported by Dr. Kedzie as having occurred under his own observation, or within his knowledge.

1. Dr. J. H. B. and his two boys. The doctor's bed-room was papered with wall-paper of a grayish color, toned with green, and had a few bright green flowers or leaves. His boys occupied a bed-room next to his, and the door between the rooms was open at all times. The Doctor was troubled with severe pains in the bones, symptoms of chronic rheumatism, and constant cough. The boys became affected with pains and rheumatic soreness. Suspicion was aroused that the wall-paper might be the cause of this illness, and the paper was analyzed, when it was found to contain 5.47 grains of arsenic to the square foot, or six ounces of arsenic on the walls of a single room. * * * The paper was at once removed, and the Doctor and his boys entirely recovered.

2. The children of the Hon. L. D. W. Emma, aged nine, occupied a bed-room, the walls of which were covered with paper of a greenish stone color, with bright bands of green. Soon after occupying the room, she exhibited the following symptoms: Lameness, resembling rheumatism, darting pains in various parts of the body, languor in the morning, feverishness, pains in the head and frontal sinuses, sores in various parts of the body, "faint spells," and great loss of flesh. The best medical advice that could be procured was obtained, but no essential improvement followed. Whenever she left home for a time her health improved, but she relapsed into her former condition on returning home. The paper on the wall was analyzed, and found to contain 4.87 grains of arsenic to the square foot. Emma was removed from the room and entirely recovered her health.

3. Last fall, the son, Herbert, was allowed to occupy the same room. In a short time all the distressing symptoms which had afflicted Emma were developed in Herbert. He was removed from the room and entirely recovered.

4. Mr. H. had his house papered with wall-paper which contained a considerable quantity of green. Soon after Mrs. H. and all the children passed into a condition of continued ill-health. The time of the commencement of this ill-health was so nearly identical in all the cases, and the symptoms were so similar, that Mr. H. was convinced that there was some common cause operating on his family to cause this mysterious sickness, but he was unable to find anything in the condition of his home or its surroundings which would explain it. While examining the report of the State Board of Health, his attention was called to poisonous wall-paper as a possible cause of ill health. The wall-paper in his rooms was analyzed, and found to contain 1.88 grains of arsenic to the square foot. It was at once removed, and Mrs. H. and the children recovered their usual good health.

These cases require no comment. But as *all green wall-papers do not contain arsenic*, it is well to menttion the ready method of distinguishing those that do. "The green arsenical colors are readily soluble in ammonia water. If a little ammonia water poured on the paper discharges the green color, or produces such a change in the color

as indicates the removal of green, the paper should be rejected, as it probably contains arsenic. To identify the presence of arsenic in any paper, wet the paper with ammonia water, pour off this water on a clean piece of glass, and drop into it a crystal of nitrate of silver, or a small piece of lunar caustic. If a yellow precipitate forms around the crystal, it indicates the presence of arsenic." L. S. J.—*Va. Med. Monthly.*

IS THERE DANGER OF "DRIVING IN" A SKIN DISEASE?—The popular opinion says there is. We have heard the venerable Prof. Geo. B. Wood sanction this opinion. Dr. McCall Anderson, in his late book on Skin Diseases, denies it, and scouts it. His reviewer, in the *Medical Press and Circular*, says:

"Eczema, known to have a constitutional origin, ought not to be suddenly cured. That eczema very often relieves the system by its appearance does not admit a doubt. In the young its sudden suppression has been followed by water on the brain, and here the disease had been confined to the head; and in after-life, when the gouty poison is so often mixed up with the eczema, we have known bad effects at once follow the disappearance of the rash. We have seen pemphigus make its appearance, and confined exclusively to the parts where the eczema had been. Violent cramps, too, are not uncommon under similar circumstances; and we have seen most obstinate cough and some forms of dyspepsia also come on. Every one, too, must have known bad effects follow the drying up of what seemed at the moment a very trivial discharge. This subject might be pursued very much further, but such is not called for here; and we would only add that on this point of the drying up or curing such a disease as eczema, too much caution cannot be exercised."

Here is an open question, and a very practical one, which should be discussed.—*Phil. Med. Reporter.*

TANNATE OF QUININE IN CHRONIC ALBUMINURIA.—Bouchardat (*L'Abeille Med.*, July 6) says: "I am in the habit of employing the sulphate of quinine in chronic albuminuria according to the method of Dr. Devouves, and occasionally with unhoped-for success. The dose I employ is eight grains in a cup of strong coffee three times a day. This is continued for six days, and at the end of that time scammony or some similar purgative is administered. After one or two days of rest, the patient is again placed on the use of quinine, and I have frequently continued this treatment for more than a year. The food of course should, during this treatment, be highly nutritious. Lately I have been substituting the tannate of quinine for the sulphate, in doses of ten to twenty grains, three times in twenty-four hours, given in a similar manner. The digestive apparatus supports the tannate better than the sulphate."—*Medical Times.*

TREATMENT OF WHOOPING-COUGH.—Wild claims that he can cure every case of whooping-cough within eight days by the following treatment: The patient is not to leave the room, and at every access of coughing is to hold before his mouth a small piece of cloth folded several times, and wet with a teaspoonful of the following solution: Ether, 60 parts; chloroform, 30 parts; turpentine, 1 part.—*Deutsches Archiv. f. Klin. Med. Allg. Wien. Med. Ztg.*, 45, 1874.

FORMULÆ FOR THE TROUBLESOME COUGH OF PHTHISIS:—

℞. Potassii bromidi, Potassæ chloratis, Ammoniæ muriatis, } aa ʒ iss.
Syrup. tolutani ℥ iv. M.
Tablespoonful every two or three hours.

℞. Tincturæ opii camphoratæ, ℥ i.;
" belladonnæ, ʒ i.;
" hyoscyami, ʒ ij.;
Spiritus Lavendulæ comp., ℥ i. M.
Ten drops on a lump of loaf sugar every hour until cough is relieved.—*Charity Hospital, New York.*

ON A RATIONAL TREATMENT OF PULMONARY PHTHISIS.—In a note presented to the Paris Academy, M. Pietra Santa upholds the doctrine of curability of pulmonary phthisis, after combating the German theory of cellular proliferation, and the fatalism of Broussais' school. For him, pulmonary phthisis is essentially a general and constitutional affection, a profound alteration of the acts of nutrition, a malady of the blood. Therefore, there is no panacea for a malady (symptomated by enfeebled vitality), of which the several phases of evolution form as many distinct morbid entities. There can be no antidote for a morbid diathesis, pre-existent to local anatomical lesions which characterize the affection. The unique specific for pulmonary phthisis is an intelligent and rational association of that collection of medicaments of which experience and chemical observation have made known the efficacy. The matter may be included in these precepts:

1. To call to aid, during all periods of the malady, all hygienic resources —moral and hygienic treatment, pure and renewed air, tonic alimentary regimen, moderate exercise, lactic diet.

2. To utilize mineral waters—sulphuretted, arsenical, chlorides.

3. To call to assistance the salutary effects of change of place, sojourn in temperate climates in winter, in mountainous countries during summer.

4. To neutralize the morbid ferments that engender in the organism purulent absorption, and lead to establishment of tuberculous matter. This is effected by the administration of hyposulphites and of alkaline and terrous sulphates.

5. Never to neglect the numerous general therapeutic agents, when these tend to combat the complications inseparable from each period of the malady.—*London Med. Record*, Dec. 20, 1874.

A HEALTHY YEAR.—It appears from the address of the President of the American Public Health Association that the present has been an exceptionally healthy year. This is shown by the reports now coming in of the various countries of the civilized world. Not only has there not been a movement of the great epidemics, but the general death-rate has been much less than during the preceding year.

A HINT IN GIVING IODIDE OF POTASSIUM.—A useful hint is revived in the *British Medical Journal* by Mr. Joseph P. McSweeney. He says: "Sir James Paget was the first to call the attention of the medical profession to the following interesting fact —namely, that carbonate of ammonia greatly increases the therapeutic action of iodide of potassium. I have had extensive experience in the treatment of syphilis, and have tried it with the best results, and find that five grains of potassium, combined with three grains of carbonate of ammonia, are equal to eight grains of the potassium salt administered in the ordinary way."

THE French Academy of Sciences recently made its awards of prizes for the years 1872 and 1873, distributing a total amount of over $11,000, gold, among twenty or more successful competitors, in sums of from $100 to $2,000.

With the exception of three small prizes in the department of botany, the prizes given were for investigations and discoveries in medicine and surgery; while in a few instances, appropriations appear to have been made for reimbursement of expenses of competitors who failed to obtain prizes.

At a meeting of the Academy in January of the present year, the announcement was made of the receipt from the Minister of the Interior, of a sum of $800, half of which is to be awarded to the best treatise upon the hygiene of infant children; the remainder to be expended in the publication of the successful work, and in encouragement.

THE INFLUENCE OF OZONE.—As heretofore remarked in this journal, the influence of ozone on health is esteemed of less and less magnitude. In the last Health Report of the British Navy is a paper on the subject by Staff-surgeon J. Mulvany. In conclusion he expresses an opinion that no disease can be clearly traced either to the superabundance or scarcity of ozone. Also that its most marked influence appears to be exercised over the generative organs; and as it tends to increase the chances of fecundation, the probability is that it imparts to the primary elements of life an accession of developmental force, which counteracts the transmission by the parents of that impaired bodily vigor which is always induced by the condition of heat, humidity, and clouds, etc., under which the manifestations of ozone are most liberal. And in this way ozone may be looked on as an important agent in the prevention of the degeneration of the human race. This is certainly a curious, and if correct, a conclusion of no trifling value.—*Phil. Med. Reporter.*

KEEPING THE BED AFTER CONFINEMENT.—Dr. William Goodell, of Philadelphia, in his account of the arrangement of lying-in women in the Preston Retreat, writes as follows in regard to the common practice of keeping the bed:

Lying-in women are encouraged to get up for food when they feel so disposed, because there are, to my mind, strong objections to the rigorous maintenance of the recumbent posture. Labor is, in general, a strictly physiological process, and there can be no sound reason why it should be made to wear the livery of disease. Nature teaches this very plainly, for most women wish to get up long before their physicians are willing to let them. The fact of a woman's wishing to get up is, to me, a very good reason why she should get up. In the second place, few physicians will deny that nothing so relaxes the tone of muscular fibre as a close confinement in bed. In my experience, a woman ordinarily feels stronger on the fifth day than she does on the ninth, if rigorously kept under quilts and blankets. Once more: the upright position not only excites the womb to contract, but, by distributing the blood and equalizing the circulation, it actually lessens the amount of the lochia and shortens their duration. On the other hand, the dorsal deubitus keeps up a passive congestion of the womb as a whole, the engorgement of the greatly hypertrophied placental site, and a blood-stasis in the now thickened posterior wall—all important factors in hindering the process of involution. Again: uterine diseases are hardly known among those nations whose women early leave their beds. From passages in the writings of the classics, it is evident that among the ancient Greeks and Romans, those models of physical strength and beauty, the women arose, and even bathed in a running stream, very shortly after delivery—in some cases on the very day. Finally, what is sounder than all theory, a sufficiently long and well-sifted experience has proved to me that by such a treatment convalescence is rendered far more prompt and sure. At this result, very unexpected to the multiparous patients of the Retreat, they are constantly expressing their surprise.—*Pacific Med. and Surg. Journal.*

TOO GOOD TO BE TRUE.—M. Paraf has discovered a way of doing without rain, if necessary. He knew that the air is full of moisture, and he knew that chloride of calcium would attract and condense it, for cultural purposes. He has applied this chloride on sand-hills and roadbeds, on grass, on all sorts of soils, successfully, and he has ascertained that it may be applied in such proportions as will produce the irrigation of land more cheaply and efficiently than by means of canals or other methods of securing artificial irrigation.—*Boston Journal of Chemistry.*

NEW ANTISEPTIC OINTMENT. — Prof. Lister, according to the *Student's Journal and Hospital Gazette*, is at present using, with great success, an ointment composed of paraffin, 2 parts; white wax, 1 part; sweet oil of almonds, 2 parts; and boracic acid (powdered), 1 part. — *Medical and Surgical Reporter.*

TREATMENT OF PILES AND PROLAPSUS OF THE RECTUM BY INJECTION INTO THE RECTUM OF EXTRACT OF ERGOT.—Dr. G. William Semple, of Hampton, Va., reports (*Virginia Med. Monthly*) the case of R. M. B., whom he operated upon for piles in 1868 with the ecraseur. "The disease began to return in eighteen months, and increased to such an extent, accompanied by prolapsus of the rectum, that for three years there had been a considerable loss of blood every day, and it had been necessary that he should lie down after each evacuation of the bowels to await the return of the prolapsed rectum, when, on the 8th of April last, I operated on him by the application of nitric acid. This, contrary to my usual experience, produced violent pain and irritation of the neck of the bladder, requiring for three days large and repeated doses of morphia.

"After healing of the slough, the piles still continued to bleed and to be painful, but the patient was unwilling to submit to further operative procedure. Having, at the same time under successful treatment, by ergot, a mammary tumor, and my attention having been called to the relief of varicose veins by the hypodermic injection of ergotin, and remembering that in several cases of imperfect involution of the uterus, in which I had successfully prescribed ergot in combination with sulphates of quinia, iron and strychnia, and extract of cannabis indica, in which piles coexisted, they also had been cured, I ordered the injection of ℥ ss. of the fluid extract of ergot, with ℥ ss. of water, into the rectum after each evacuation. Though the patient has been irregular in pursuing the treatment, he has since seldom had any discharge of blood or suffered any inconvenience, and now considers himself cured.

"On the same day (May 1) this prescription was made, B. H. L., convalescent from typho-malarial fever, who had suffered with piles and prolapsus of the rectum for fifteen years, daily losing blood, and being obliged to lie down after every evacuation to await the return of the prolapsed part before resuming his work, called on me for advice. Ordered the same treatment, which he pursued steadily. At the end of six weeks, having had but one discharge of blood, he felt himself well, saying he was a new man.

"This patient's spleen had been greatly enlarged for many years, and that, much to my surprise, was reduced to its normal size by the treatment.

"I have since prescribed the same treatment in three other cases of piles, all of which have been cured. One of the patients was a pregnant woman. No labor-pains were produced, or inconvenience felt."

DIGITALIS. — M. Gaunot, in the course of a paper published in the *Gazette Medicale de Paris*, on the action of digitalis, says: "When digitalis or digitalin is administered for some time to a man in full possession of sexual powers, these become gradually weakened, the propensities disappear, formation of the liquor seminis diminishes, and may at last cease altogether. The anaphrodisiac properties of the drug are the secret of its good effect in spermatorrhœa."

Dr. Little recommends the use of digitalis in febrile cases in which stimulants are either not well borne or are contra-indicated, as where renal affection is present. He has given half-drachm doses of the tincture every three or four hours in typhus, enteric and rheumatic fevers, with very favorable results. — *Edinburgh Medical Journal.*

PUERPERAL FEVER. — In the address in obstetrics, delivered at the last annual meeting of the British Medical Association,* Dr. J. Matthews Duncan stated that it was his belief, that nearly one in every one hundred women, delivered in Great Britain at or near the full time, died in parturition, or before the puerperal state and its effects had passed away. In addition to this startling mortality, parturition brings with it a vast amount of disease and suffering which does not end fatally. By far the largest number of deaths are due to puerperal pyæmia, a term which Dr. Duncan would substitute for the erroneous one of puerperal fever, since there is nothing essentially puerperal known in it, nor anything of the nature of a fever as that term is generally understood. All evidence brings the disease into the closest alliance or identity with surgical pyæmia. It is a disease always present; but never has it been shown to possess an epidemic character. It varies in its ravages just as pneumonia does, but in a very different manner from what is found to be the case with cholera or scarlatina. The puerperal woman presents a most favorable nidus for the reception of morbific material in her contused and lacerated passages, and patients suffering from puerperal pyæmia, or any allied diseases, offer this morbific material in its most potent essence. No other well demonstrated communicability has ever been proven, as tending to show that this disease is either contagious or infectious. The same laws of pathology govern lying-in hospitals as govern all hospitals, and it is absurd to claim that any greater danger exists for patients in one than for those in the other. Beyond question, pyæmia is a septic disease, and puerperal pyæmia may be almost if not altogether prevented by the application to delivery of a practice based on antiseptic principles.

In a carefully prepared treatise on Erysipelas and Puerperal Fever, recently published, the author, Dr. Thomas C. Minor, gives in detail an account of both diseases as they prevailed sporadically in the United States during the year 1870, and also the history of a puerperal fever epidemic observed in the southwestern part of Ohio in the winter of 1872. The facts, as given by Dr. Minor, appear to establish the fact that erysipelas and puerperal fever seem to prevail together throughout the United States, and that any marked increase of one disease in any particular locality, is always followed by a corresponding increase of the other. Infants die of erysipelas shortly after or before their mothers die of puerperal disease.

M. Chauffard * considers that any disease which produces morbid discharges may give rise, in women recently confined, to puerperal fever. During his service at the Neckar Hospital, he has frequently remarked that the opening of an abscess, or the presence in the wards of purulent ophthalmia or erysipelas, is sure to be followed in a short time by puerperal troubles of greater or less severity.— *Boston Med. and Surg. Journal.*

* *Obstetrical Journal of Great Britain*, Sept., 1874.

ENLARGEMENT OF THE TONSILS AS A CAUSE OF NIGHTMARE.—J. Warrington Haward, F. R. C. S., relates some cases of nightmare occurring in children, resisting ordinary methods of treatment, and increasing in frequency and severity, which were at once permanently cured by the removal of a portion of the tonsils. As these glands were enlarged, he was led to believe that the obstruction to respiration and consequent cerebral congestion were sufficient to produce the disorder. Nightmare due to gastric irritation or dentition occurs, as a rule, only once in the night, while that due to enlarged tonsils often recurs several times in the same night, and is invariably observed to be aggravated by the child catching cold.— *British Medical Journal.*

* *Gazette Hebdomadaire*, October 16, 1874.

THE TENSILE STRENGTH OF THE FŒTUS.—Dr. J. Matthews Duncan reports* a series of experiments undertaken to ascertain the amount of force which can safely be applied in effecting the delivery of a child. The body of a new-born baby was passed through an aperture so cut in hard wood as to represent the brim of a contracted pelvis. Above the ankle, an apparatus was applied by which weights could be suspended. The amount of the weights used was to be gradually increased until the body of the child was dissevered. In order to bring the experiment into conditions analogous with those of labor, the weights were allowed to operate for only half a minute at a time. In each experiment the separation took place at the neck. The decapitating force varied from ninety-one to one hundred and forty-one pounds, giving, therefore, an average of about one hundred and twenty pounds.

The life of the child is, of course, compromised before the limit of the tensile strength of the fœtus is reached, since the destruction of the spinal column occurs under the application of a force considerably less than is required to produce decapitation.

In these experiments it was found that the cervical part of the vertebral column first gave way, allowing the dissevered vertebræ to become widely separated before actual decapitation took place. While one hundred and five pounds sufficed to separate the cervical vertebræ, an addition of fifteen pounds was required to decapitate. In all cases the vertebral column yielded with a jerk, followed by a marked elongation of the fœtal body. This fact is, therefore, one of great importance to the accoucheur if he wishes to avoid decapitation. It was further found that a single limb, so far as strengh was concerned, sufficed to effect decapitation by traction.

These experiments are of great value as regards the force that may safely be employed in podalic extraction; but it was found a far more difficult problem to ascertain the power that may safely be applied in extracting a child with the forceps. In this latter case, a far greater force can be exerted than in the former. It has been proven that it is possible to apply the forceps to a fœtal head at the brim of an actual pelvis, so as to defy the utmost efforts of the most powerful accoucheur. The fœtal head is firm enough to resist a dragging force far greater than can be used in podalic extraction.—*Boston Med. and Surg. Jour.*

* *British Medical Journal*, December 19, 1874.

IN cases of dropsy of the joints, especially that of the knee, Dr. Bergeret finds the continued application of bags of hot sand to answer better than any other kind of treatment. When the acute stage is passed, and whatever may be the cause of the dropsy, he wraps the joint in a thick layer of cotton-wool, and applies to this a sack containing two or three litres of fine and very hot sand. The dropsy disappears in a few days. The sand must be very hot, and the heat may be kept up by means of covering with a blanket. The sand must not be too thick in the bag, so that it may extend easily on the knee, and overhang the hydrarthrosis in every direction.—*Boston Medical and Surgical Journal.*

DIPHTHERIA.—Dr. J. Lewis Smith, (*N. Y. Medical Record*) says: The local treatment consists in the application to the fauces, every three hours, of the following, which has given me better satisfaction than any other medicine for local treatment which I have employed: ℞. Acidi carbolici, gtts. v.; liq. ferri subsulphat, ʒ ij.; glycerin, ℥ i. M. The brush was employed in preference to the probang, as it is less painful, and where there is a pseudo-membrane does not produce hæmorrhage by its detachment.

INCISION OF THE CERVIX UTERI.—Prof. R. Olshausen * divides dysmenorrhœa into three varieties, according as its origin may be considered obstructive, congestive, or ovarian. Incision of the cervix uteri is to be used only in that class of cases, small in number, where the dysmenorrhœa is dependent upon the small size of the external os. In cases where either the internal os or the cervical canal is found to be narrowed by some lesion of the lining mucous membrane, the cervix uteri should never be incised. In all cases where the sound enters the uterine cavity suddenly, as if passing some contracted spot, whether that contraction be owing to disease, or is the normal condition of things, an incision should be made. Wherever sterility is found to exist with mechanical dysmenorrhœa, there is always a pathological contraction of the external os. In those cases in which we are attempting the removal of sterility, the external os may be incised, even though it appear to be normal. It is a well-known fact that the dilatation of the os, as occurs in labor, is favorable to a subsequent conception, since many women, who have been sterile for a long time, gave birth to a number of children rapidly after the birth of the first child.

The best instrument to be used in performing incision is Sims' blunt-pointed bistoury. The blade should in all cases be passed as high up as it is desirable to make the incision, and the cut should be made from above downwards. The instrument should then be withdrawn, and the opposite side cut in the same manner. It is very important that the external os should be so deeply cut as to leave an open slit. The lips are then to be kept apart by tearing any adhesions which may form every twenty-four or forty-eight hours, and a solution of the perchloride of iron should be subsequently applied. Sponge tents should never be used, since they are liable to produce septicæmia. The operation should never be performed if there is any inflammatory process going on in the neighborhood of the uterus.

In those cases where there is anteflexion of the uterus, accompanied by sterility, a good result seldom follows the ordinary lateral incisions. In these cases, a wedge-shaped piece should be cut out of the anterior lip. The bilateral incision of the os uteri is recommended in all severe cases of uterine catarrh, since internal medication of the uterine cavity is then rendered more easy of application.

The operation of incision is one worthy of the most careful study, and requires the greatest care in the performance of it, as well as in the after-treatment of the patient.—*Boston Med. and Surg. Journal.*

* *Volkmann's Sammlung klin. Vortrage*, 67, 1874.

CARBOLIC ACID IN TAPEWORM.—Dr. S. A. Brown, U. S. N., writes to the New York *Medical Record:* In a recent issue of your journal I noticed a letter from Dr. Bills, of the army, recommending the use of carbolic acid in the treatment of tapeworm.

Having a case on hand at the time which had resisted the use of oil of turpentine and pepo for a month or six weeks, I immediately administered to him the following prescription: ℞. Acid carbolic cryst., gr. ij.; glycer. pulv. gr. iv. Ft. pil., No. 2. To be taken every three hours, beginning at 9 a. m. and continued until 9 p. m. This followed in the morning by jalap and rhubarb, ten grains each. On the first day a few joints were passed; on the second a great number, and on the third the head and narrow portion came away, with a great number of small sections, from one to three inches long. On the fourth day, treatment being kept up without further result, the medicine was discontinued. The only sensation created in the stomach by the administration of such large quantities of the drug was a slight burning, not sufficient to inconvenience the patient. I look upon this as a perfect cure, and therefore report the case to you.

HÆMORRHOIDS.—Dr. Wm. Colles, Dublin, lately injected twenty minims of tincture of perchloride of iron into each internal hæmorrhoidal tumor. No traces could be found some weeks afterward, by speculum, except nodules, of the size of a shrivelled currant. The case had resisted Dr. Houston's application of fuming nitric acid.—*British Medical Journal*, June 27, 1874, p. 849.

RESEMBLANCE OF TWINS. — Dr. Bird declares that, according to his own experience during thirty years, twins which are contained in the same membranes, and have a single placenta, resemble each other; while those which are contained in separate membranes, and have different placentæ, do not resemble each other more than other children of the same parents.—*La Tribune Medicale.*

ASPIRATION IN PLEURISY. — The question as to the use of the pneumatic aspirator in pleurisy has of late been discussed by Dr. Becker, of Munich. In cases where the operation is one of necessity for the preservation of life, there can, of course, be no question as to its propriety; but in most cases of pleurisy with serofibrinous effusion, Dr. Becker is decidedly opposed to aspiration of the fluid. Exen where the pleural cavity is so full that the heart is much displaced, as long as the respiration and circulation are not disturbed, he would leave the cure to nature. He contends that when the fluid has reached a certain amount, effusion ceases, and the current setting in an opposite direction towards the vessels, the cavity is gradually emptied, and contraction and adhesion occur in due order. Nature spontaneously limits the amount of effusion by compressing the root of the collapsed lung, and thus so far arresting the circulation in the vessels of supply. If the physician interferes with this normal course of affairs, and removes the fluid before the pressure in the pleural cavity has reached a certain height, he will simply restore the circulation in the pulmonary vessels, reestablish the conditions of effusion, bring the rough surfaces of the pleura into frictional contact, and have robbed the system of so much precious fluid.

Dr. Becker considers the circumstances even more serious when the collapsed lung is adherent. Should aspiration then be performed, the fluid speedily refuses to flow, the tube collapses, and air forces its way around the needle into the chest. Worse still, the lung expanding unequally may undergo alveolar dilatation; it becomes hyperæmic, hæmoptysis may occur at once, and bronchitis and pneumonia supervene. Less serious reasons for letting nature alone in sero-fibrinous pleurisy without urgent symptoms are the facts that the risk of sudden death from fatty heart, which is present in such cases, is not removed by operation; that marasmus is not relieved by it; and that fresh pleurisy often comes on, and the chances of empyæma increase with every tapping.—*Boston Med. and Surg. Jour.*

ETHER FOR TAPE-WORMS.—When the anæsthetic power of ether was first discovered, it was only proposed to use it on human beings to render surgical operations painless. Von Heyden, the merciful man who would not inflict pain on any living creature, employed it as long ago as 1830 for killing insects for his collection. Even worms are rendered dormant and helpless by its use. Prof. August Vegel now announces a new application of this anæsthesia for worms —its application to tape-worms. The ether is enclosed in a gelatin capsule and swallowed. The ether is vaporized in the stomach, and the worm stupefied, it being then easily removed by any of the usual remedies, against which when awake, the worm offers a strong resistance.

THE VALUE OF QUINIA IN ACCELERATING PARTURITION.—Dr. O. B. Stafford, of New Boston, Ill., reports (*N. Y. Med. Jour.*, Feb. 1875,) several cases illustrating the value of quinia in accelerating parturition. In his first case his patient had been in labor for twenty-four hours, but for two hours previous to his seeing her, had been without any pain whatever. Found a well-dilated bag of waters presenting properly, but everything pertaining to active labor positively quiet. He gave her eight grains of sulphate of quinia at one dose, and in twenty minutes strong expulsive labor-pains set in, and in one hour labor was terminated.

In another case the patient had been in labor about eighteen hours, but aside from presentation of bag of waters and dilatation of os uteri to the size of a shilling, no progress had been made. After waiting two hours, and finding that manipulation about the os failed to produce any uterine contraction, Dr. Stafford gave her about seven grains of quinia. In thirty minutes, patient complained of strong bearing-down pain. Uterine walls hardened, dilatation was completed, and in one hour and a half delivery was completed.

One very remarkable feature Dr. Stafford finds, presents itself in the administration of quinia in obstetrical cases. It does not produce that *spasmodic* uterine contraction, which in his hands at least, so frequently follows the giving of ergot; also an unusual freedom from flooding; the entire placental mass is dislodged with but little difficulty, the uterus contracts firmly, presenting that hard, woody feeling which is so pleasing to the careful obstetrician.

In all his cases, the mothers convalesced well. General nervous prostration did not ensue to so great an extent as we frequently observe. Lochial discharges were normal, and there was a marked freeness from malarial difficulties, puerperal fever, chills, etc., which are so prevalent in the Mississippi Valley.

EXTERNAL USE OF TURPENTINE IN THE TREATMENT OF TONSILITIS.—In the *Leavenworth Medical Herald* Dr. S. H. Roberts strongly recommends the use of turpentine externally in tonsilitis. He folds the flannel to four thicknesses, wrings it out in hot water, and pours oil turpentine over a spot the size of a silver dollar. The flannel is then applied over the sub-parotid region, and the fomentation continued as long as it can be borne. After removal a dry flannel is applied, and the same region rubbed with turpentine every two hours. This application is continued daily till resolution occurs. The doctor believes, from the evidence of his long experience, that thus applied early in the disease, the oil of turpentine has almost a specific effect in tonsilitis. That its action is not simply that of an irritant, he has proved by employing mustard, croton oil, tr. iodine, etc., in the same class of cases. They always failed to diminish the inflammation of tonsils, while the turpentine succeeded.—*Detroit Review of Med.*

A SIMPLE METHOD OF REDUCING THE DISLOCATION OF THE FOREARM BACKWARDS.—Dr. Alexander Murray writes to the *New York Medical Record* of July 1, 1874, that he has reduced five cases of the above-mentioned dislocation by the method to be described.

Supposing the dislocated arm to be the left. Dr. Murray takes his position at the outside of the dislocated arm, and places the palm of his right hand to the patient's left, dove-tailing his fingers between each of the patient's. In this way, a firm hold is secured for extension. He then places his elbow as a fulcrum and for counter-extension on the forearm in front and against the lower end of the humerus, and by a steady pressure downward and backward, and at the same time flexing the forearm toward the shoulder, in a few minutes the luxated bones slip into their natural places. Other dislocations of the elbow can be reduced by the same method.

Book Reviews.

PULMONARY TUBERCULOSIS—ITS PATHOLOGY, NATURE, SYMPTOMS, DIAGNOSIS, ETC. By Addison P. Dutcher, M.D. Philadelphia: J. B. Lippincott & Co. For sale by Keen, Cooke & Co., Chicago.

This is a volume of 380 pages, and forms a very complete, comprehensive and practical treatise on the subject of pulmonary tuberculosis. The author does not put forward any especially new theories regarding either the pathology or treatment of the disease, but gives a fair, clear statement of all the recognized doctrines, and of the latest studies and investigations of the subject.

In considering the nature of pulmonary tuberculosis, the various theories are briefly reviewed under the headings of inflammatory, imperfect nutrition, defective respiration, specific morbid condition of the blood, imperfect innervation, and retrograde metamorphosis of the tissues. In summing up his own conclusions, the author says: "From a careful review of the whole subject, we think we are fully warranted in drawing the following conclusions:

1st. "That pulmonary tuberculosis is a specific disease, depending upon a morbid condition of the blood, which leads to a discharge of some of its depraved constituents on the external surface of the air cells, and under the basement membrane.

2d. "That this morbid matter is not capable of being assimilated into their textures, nor in any way contributing to their growth or maintenance, and ultimately leads to their dissolution and all its attendant phenomena.

3d. "That the tubercular diathesis increases, and is attended with cachexia, which is often disproportionate to the local disorder, thus early proving its specific and constitutional origin. Tubercular disease may, however, sometimes, cease in part; yet, if we look to its fearful mortality as an index of its natural course, we may see in it a law of increase like that exemplified in some of the more malignant disorders, such as cancer. And such a law is not exemplified in ordinary local diseases, for they generally tend to subside with the lapse of time."

These conclusions are fairly stated, and embody, we think, the now most generally recognized doctrine of the nature of tubercular disease.

In succeeding chapters, the condition of the blood and of the various organs in pulmonary tuberculosis and the general symptoms, physical diagnosis, etc., of the disease are considered.

Among the physical signs, the author gives more prominence than most writers on the subject, to the dark red or purplish margin along the edge of the gums, which is denominated Thompson's gingival margin. This he considers one of the earliest, most constant, and positive evidences of the tubercular diathesis. He considers it of especial value as one of the few signs diagnostic of the early or pre-tubercular stage of the disease; where, if recognized, it is comparatively manageable and amenable to treatment.

The various symptoms and complications which are common to the different stages of pulmonary tuberculosis, are discussed under appropriate headings. Numerous cases from the author's abundant experience, illustrative of peculiarities in pathology, diagnosis or treatment, are also interspersed throughout the work.

The causes of phthisis, are discussed under two heads: the hereditary and the accidental. Among the latter, variations of temperature, imperfect nutrition, depressing and exciting passions, intemperance, etc. are classed as the most prominent. The possibility of transmission by inoculation or contagion, is also briefly considered. Several chapters are devoted to food, clothing, exercise, and various hygienic regulations for the preservation and restoration of health of consumptives, with a last closing chapter on alcoholic stimulants. The chemical nature and the physiological action of alcohol are considered, and the theories of those who advocate their use in pulmonary tuberculosis are fairly stated. The author gives the weight of his influence and opinion with that of many other careful observers, as opposed to their use, and denying entirely their value or efficiency, in either arresting or retarding the progress of pulmonary tuberculosis.

There is running through the work a vein of sentiment and religious fervor, breaking forth occasionally into poetical rhapsody—passages, beautiful, eloquent and appropriate in themselves, judged from a literary standpoint, but which strike one as a little odd or misplaced in a plain, matter-of-fact, scientific treatise.

As a whole, however, we heartily and conscientiously endorse each and all of the views and opinions advanced by the author.

F. H. D.

THE DISEASES OF THE STOMACH. By Wilson Fox, M.D., etc. Philadelphia: H. C. Lea. 8vo.; 280 pp.

This, under a new title, is really a third revised and enlarged edition of the author's little treatise on the diagnosis and treatment of the varieties of dyspepsia. The present edition is much more complete and comprehensive in its scope and character, including all the diseases of the stomach.

The author's name and reputation as a writer and authority upon this subject, renders superfluous an extended comment upon the excellence of the work.

CLINICAL LECTURES ON DISEASES OF THE URINARY ORGANS, Delivered at University College Hospital, by Sir Henry Thompson. Philadelphia: H. C. Lea. For sale by Jansen, McClurg & Co., Chicago. 8vo; 200 pp. Price $2.25.

This is the second American, reprinted from the third London edition of this little work. The author's aim, he states, has been to produce in the smallest possible compass, an epitome of practical knowledge concerning the nature and treatment of diseases of the urinary organs. That this aim of the author has been accomplished, is sufficiently proven by the abundant success of the former editions.

DENTAL PATHOLOGY AND SURGERY. By S. J. A. Salter, M.D. New York: Wm. Wood & Co. 8vo; 400 pp.

This seems to be a very complete and comprehensive treatise on dental pathology and surgery. The author

has devoted himself exclusively for the past twenty-three years to the practice of dental surgery, and as dental surgeon to Guy's Hospital, has had abundant field for study and experience in this special department. The work is well and numerously illustrated. Covering, as it does, a special field which is but imperfectly elaborated in the works on general surgery, the surgeon will find it a valuable and useful addition to his library.

A SERIES OF AMERICAN CLINICAL LECTURES, Edited by E. C. Seguin, M.D. Vol. I, No. 1. ON DISEASE OF THE HIP JOINT, by Lewis A. Sagre, M.D. New York: G. P. Putnam's Sons. For sale by Keen, Cooke & Co., Chicago. 24 pp. Price 40c.

This is the first issue of the proposed series of American Clinical Lectures. The numbers, for the present, are to be issued monthly, and sold separately, at from thirty to fifty cents each. The contributors to succeeding numbers, so far as announced, are Prof. Austin Flint, Sr., Prof. A. L. Loomis, Prof. A. Jacobi, Prof. T. G. Thomas, Prof. W. H. Thompson, Prof. H. R. Sands, and Prof. W. H. Draper, all of New York.

PAMPHLETS RECEIVED.

MIGRANTS AND SAILORS, Considered in Their Relations to the Public Health, by John M. Woodworth, M.D. and Heber Smith, M.D. Riverside Press, Cambridge. A Reprint from Proceedings of American Public Health Association.

PHYSICIAN'S POCKET CASE-RECORD AND PRESCRIPTION BLANK BOOK, WITH VISITING LIST. Cincinnati: Case Record Company. 35c. each; $3.50 per dozen. A larger office edition similarly arranged, but without the Visiting List, $1.50 each. For sale by Keen, Cooke & Co., Chicago.

This is the most compact and convenient book for the purpose that we have ever seen. It is of convenient size for the pocket, contains about ninety prescription blanks, with stubs for copy of the prescriptions, and record of cases, and a visiting list calculated for thirty patients per week for one month.

SCLERITIS SYPHILITICA; Its Pathology, Course and Treatment. By Fred. R. Sturges, M.D. New York: G. P. Putnam's Sons.

THE RELATIONS OF THE NERVOUS SYSTEM TO DISEASES OF THE SKIN, by L. Duncan Buckley, M.D. New York: G. P. Putnam's Sons.

A RETROSPECT OF THE STRUGGLES AND TRIUMPH OF OVARIOTOMY IN PHILADELPHIA. Annual Address Before the Philadelphia County Medical Society, by Wash. R. Atlee, M.D. Thos. Collins, 705 Jayne Street.

PRACTICE FOR SALE.

A Physician's practice, good will, etc., at one of the famous Springs, South. Price, $20,000 cash, or good secured paper. The practice now amounting to upwards of $40,000 actual cash receipts yearly, and increasing. The Physician who wishes to sell, has amassed a competency, and wishes to retire. For full particulars, please address, L. A. GILBERT,

206 La Salle Street,

Chicago, Ill.